

safely requires a dedicated service as outlined in BSG guidelines for IBD, and not necessarily a tertiary care referral!

Disclosure of Interest None Declared.

PWE-106 SMALL INTESTINE ULTRASONOGRAPHY WITH ORAL CONTRAST (SICUS) FOR THE DETECTION OF SMALL BOWEL COMPLICATIONS IN CROHN'S DISEASE: CORRELATION WITH INTRA-OPERATIVE FINDINGS

¹S Kumar*, ¹A Hakim, ¹C Alexakis, ¹V Chhaya, ²D Tzias, ²J Pilcher, ¹R Pollok. ¹Department of Gastroenterology, St George's Hospital, London, UK; ²Department of Radiology, St George's Hospital, London, UK

10.1136/gutjnl-2014-307263.366

Introduction SICUS accurately assesses small bowel lesions in patients with Crohn's disease (CD) without exposure to diagnostic medical radiation.¹ Its role in identifying intra-abdominal complications associated with CD remains to be confirmed. The aim of this retrospective study was to compare the diagnostic sensitivity of SICUS with subsequent surgical findings.

Methods Patients with CD evaluated by SICUS who subsequently required bowel resection within 6 months were identified. Radiological findings and operation notes were collated. The accuracy and agreement of SICUS to detect the site and length of strictures, fistulae, abscesses and mucosal thickening, was compared with surgical findings and assessed by kappa (κ) coefficient statistical analysis. Stricture lengths were compared using student's t-test. CRP and platelet count were recorded within 2 weeks of SICUS and surgery as surrogate markers of disease activity.

Results A total of 25 patients (12 male) with a mean age of 29.9 years were included in the study. Mean time from SICUS to respective bowel surgery was 91.5 days (Range 5–176). Ultrasonographic and surgical inter-rater agreement was good for the presence of strictures ($\kappa=0.73$, sensitivity and specificity both 88%), their number ($\kappa=0.65$, 95% CI: 0.31–0.96) and stricture site ($\kappa=0.72$, 95% CI: 0.44–1.00). Stricture length was 7.4 ± 1.5 cm identified at surgery vs. 5.8 ± 1.8 cm by SICUS (NS). Agreement was excellent for the presence of fistulae ($\kappa=0.82$, sensitivity 86%, specificity 94%), location of fistula ($\kappa=0.92$, 95% CI: 0.76–1.00), presence of abscess ($\kappa=0.87$, sensitivity 100%, specificity 95%) and its location ($\kappa=0.87$, 95% CI: 0.63–1.00). Agreement was moderate for mucosal wall thickening ($\kappa=0.51$, sensitivity 95%, specificity 50%). Markers of inflammation (CRP and platelet count) showed no significant difference at the time of SICUS and surgery.

Conclusion SICUS accurately identifies small bowel complications in CD and offers an alternative in the pre-operative stage of CD complications. Its wider use should be adopted.

REFERENCE

- 1 Chatu S, Pilcher J, Saxena SK, et al. Diagnostic accuracy of small intestine ultrasonography using an oral contrast agent in Crohn's disease: comparative study from the UK. *Clin Radiol* 2012 Jun;67(6):553–9

Disclosure of Interest None Declared.

PWE-107 ACCURACY OF MAGNETIC RESONANCE ENTEROGRAPHY IN PREDICTING ANASTOMOTIC STENOSIS IN RECURRENT CROHN'S DISEASE

¹SS Poon*, ²R Wiles, ²F Ammad, ²P Healey, ³S Subramanian. ¹Faculty of Medicine, University of Liverpool, UK; ²Department of Radiology, Royal Liverpool and Broadgreen University Hospital, Liverpool, UK; ³Department of Gastroenterology, Royal Liverpool and Broadgreen University Hospital, Liverpool, UK

10.1136/gutjnl-2014-307263.367

Abstract PWE-107 Table 1 Baseline characteristics

	Median	Range
Age (years)	44	29–71
Disease duration (years)	23.5	5–45
Time since last resection (years)	7	4–25
Time between MRE and endoscopy (days)	46	3–144

Introduction Up to 80% of patient with Crohn's disease (CD) undergo intestinal resection, commonly an ileocaecal resection. Eighty percent of patients develop endoscopic recurrence at the anastomotic site at 1 year and 50% develop clinical recurrence at 3 years. The severity of endoscopic recurrence varies from no endoscopic lesions to anastomotic stenosis and/or diffuse inflammation. Direct endoscopic visualisation is recommended to detect recurrence but it is invasive. Magnetic resonance enterography (MRE) has become a standard imaging investigation for CD but only few studies have evaluated its utility in recurrent anastomotic stenosis. Accurate characterisation of recurrence grade is critical as strictures up to 5cms can be successfully treated with endoscopic balloon dilatation. We evaluated the utility of MRE in the assessment of anastomotic stenosis in recurrent CD.

Methods This retrospective study was done at the Royal Liverpool Hospital and included all CD patients who underwent endoscopic balloon dilatation for anastomotic stenosis between 2009–2013. Patients who had an MRE done within 6 months of the endoscopic procedure were eligible for inclusion. MRE was done following administration of oral polyethylene glycol solution and sequences were analysed for the presence of stenosis, length of stenosis, pre-stenotic dilation and the presence of enhancement by an experienced gastrointestinal radiologist. The length and presence of stenosis was extracted from the endoscopy report and correlated against the MRE findings.

Results 16 patients were included in the study (5 male, 11 female). There was good agreement between endoscopy and MRE for the presence of anastomotic stenosis. Using endoscopy as the gold standard, the sensitivity and specificity of MRE in detecting anastomotic stenosis was 86% and 100% respectively. A significant variation was noted in the length of stenosis as assessed by MRE (45 ± 12 mm, mean \pm SE) and endoscopy (20 ± 3 mm, mean \pm SE), two sided $p < 0.05$. All patients underwent successful endoscopic dilatation.

Conclusion MRE is an accurate tool for predicting the presence of anastomotic stenosis in recurrent CD. However, the discrepancy observed in the length of stenosis between the two modalities may mean suitable patients for endoscopic dilatation are missed. Therefore, endoscopy and MRE should be used as complementary tools in the assessment of anastomotic stenosis.

Disclosure of Interest None Declared.

PWE-108 FACTORS INFLUENCING THE MANAGEMENT OF INFLAMMATORY BOWEL DISEASE IN PRIMARY CARE

¹SA James*, ²CR May, ²M Simon, ¹JF Cummings. ¹Department of Gastroenterology, University Hospital Southampton NHS Foundation Trust, UK; ²Faculty of Health Sciences, University of Southampton, Southampton, UK

10.1136/gutjnl-2014-307263.368

Introduction Between 30–70% of United Kingdom (UK) adults with Inflammatory Bowel Disease (IBD) are managed solely by